## List of the freshwater fishes presently known from the island of Fernando Poo

by

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Freshwater fishes have been collected on the island of Fernando Poo at different times. A first important collection was made by Mr. F. Newton in 1893—1894. A report on this collection was published by B. Osorio (1895) who listed five species from freshwater and many other marine species. A second important collection was made by Mr. E. Seimund in 1902-1903 and contained seven species of freshwater fishes. No special report was made on it, but the specimens are listed by G. A. Boulenger in his "Catalogue of the Freshwater Fishes of Africa". During a 1962—1963 mainly mammalogical and ornithological expedition Prof. M. Eisentraut also collected seven species of fishes, six of them not present in the Seimund collection. During a one week exploration of the island, in December 1964, we had opportunity to collect twenty species of fishes, twelve of them not previously recorded from the island. A full report on these two recent collections will be published later elsewhere, but it was thought useful to give by now the complete list of the fishes already collected on Fernando Poo.

The total number of fish species known at present from the freshwaters of the island numbers twenty-five. (In this number the species listed by B. Osorio are not taken into account, as the names used by this author require some further examination.) These species can be classified into different ecological categories (see G. Myers, 1949, but somewhat modified).

A. Typical freshwater fishes, strictly intolerant to salt water.

Alestes longipinnis (Gthr., 1864)

Clarias walkeri Gthr., 1896 (syn. C. poensis Blgr., 1909)

Malapterurus electricus (Gmelin, 1789)

Barbus batesii Blgr., 1903

Barbus callipterus Blgr., 1907

Barbus camptacanthus (Blkr., 1863)

Barbus trispilos (Blkr., 1863)

B. Typical freshwater fishes, but supporting an accidental stay in brackish or salt water.

Epiplatys sextasciatus Gill, 1862 Aphyosemion bivittatum Lönnb, 1895

Aphyosemion cameronensis (Blgr., 1903)

Haplocheilichthys spilauchena A. Dum., 1859

Procatopus nototaenia Blgr., 1904

Pelmatochromis nigrofasciatus (Pelleg, 1900)

C. Marine fishes enterring freely into freshwaters at various times of their life, or even reproducing in freshwater.

Syngnathus ansorgii Blgr., 1910 Microphis smithii A. Dum, 1870 Mugil falcipinnis Cuv. et Val., 1836 Eleotris monteiri O'Shaugh, 1875 Gobius quineensis Ptrs., 1876 Gobius soporator Cuv. et Val., 1837 Nematogobius ansorgii Blgr., 1910 Lentipes bustamantei Greeff, 1884

Sicydium sp. (aff. brefifilis Ogilv., 1884). The specific status of this species will be precised in a later paper.

D. Marine fishes supporting an accidental stay in freshwater.

Gerres melanopterus Blkr., 1863 Lutjanus goreensis Cuv. et Val., 1830)

E. Shore-fishes, typical for and restricted to the tidal coast-zone.

Periophthalmus koelreuteri (Pallas, 1770)

From the above mentionned list of species and from their classification into ecological groups, two main conclusions seem possible.

- 1. The absence of endemic freshwater fishes on the island. This confirms the absence of endemic species and the very low degree of subspecific endemism also stated in reptiles (only one endemic subspecies, according to R. Mertens, 1865) and in birds and mammals (about 30%) endemic subspecies, according to M. Eisentraut, 1965). This also points to a recent connection of the island with the African continent.
- 2. Research for the zoogeographical affinities of the island should be based essentially on the fishes of group A, and to a less extent also on the species of group B. The present list of species indicates a rather natural relationship with the lowland forested area of Nigeria and Cameroon, but also gives some arguments which support a rather strong relationship with the hilly forested area of South Cameroon.

## References

Boulenger, G.A.: "Catalogue of the Freshwater Fishes of Africa. Vol. I—II—

III—IV". London. Trustees. 1909—1916.

Eisentraut, M.: "Rassenbildung bei Säugetieren und Vögeln auf der Insel Fernando Poo", Zool. Anz., Bd. 174, Heft 1 (1965), p. 37—53.

Mertens, R.: "Die Reptilien von Fernando Poo", Bonner Zool. Beitr., Heft 3/4, 15 (1964), p. 211—238.

Myers, G.S.: "Salt-tolerance of Fresh-Water Fish Groups in relation to zoogeographical problems", Bijdr. Dierk., 28 (1949) p. 315—322.

Osorio, B.: "Peixes e Crustaceos da Ilha de Fernão do Pó e de Elobey". —

Jorn. Sci. Math. Phys. Nat., Acad. Lisboa, 2 sér., IV, n° XIII (1895), pp 55-58.

"Les Poissons d'eau douce des Iles du Golfe de Guineé", I b i d., p. 59-64.